UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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JAN 28 2015

REPLY TO THE ATTENTION OF:

E-19J

Phil Forst
Environmental Specialist
Federal Highway Administration
380 Jackson Street, Suite 500
St. Paul, Minnesota 55101-4802

Pat Huston
Project Manager
Minnesota Department of Transportation - District 1
1123 Mesaba Avenue
Duluth, Minnesota 55811

Re: US Highway 53 Virginia to Eveleth, St. Louis County, Minnesota, Draft Environmental Impact Statement (DEIS), dated December 2014. (CEQ No.: 20140363)

Dear Mr. Forst and Mr. Huston:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document dated December 2014 prepared by the Federal Highway Administration (FHWA) and Minnesota Department of Transportation (MnDOT) for the US Highway 53 (US 53) project. This letter with enclosure provides EPA's comments on the Draft Environmental Impact Statement (DEIS) pursuant to our authorities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), Section 309 of the Clean Air Act, and Section 404 of the Clean Water Act (CWA).

The DEIS describes and evaluates alternatives to address the pending termination of easement rights (May 2017) for a one and a half mile segment of the US 53 corridor where it crosses the United Taconite open-pit mine between Virginia and Eveleth, Minnesota. Five potential alternative alignments are evaluated in the DEIS: No Build Alternative, Existing US 53 Alternative, Alternative M-1, Alternative E-1A, and Alternative E-2. The DEIS identifies Alternative E-2 as the FHWA/MnDOT preferred alternative.

The cooperating agencies were not provided a preliminary version of the DEIS to review. However, EPA concurred with the preliminary alternatives FHWA/MnDOT proposed for analysis in the DEIS in our letters dated July 17, 2013 and October 30, 2013. As a cooperating agency and participant in the NEPA/CWA Section 404 merger process for the US 53 project, EPA also reviewed the Agency Review Draft of the Scoping Decision/Draft Scoping Decision

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Document (SD/DSDD) and provided comments in our letter dated February 9, 2012. EPA concurred with the project Purpose and Need in our letter dated September 2, 2011.

Based on our review of the DEIS, EPA has developed comments and recommendations pertaining to the comparison of alternatives, the DEIS-identified preferred alternative and alternative options, and wetlands, water quality/quantity/stormwater, noise impacts, forests, northern long-eared bat, climate change, construction impacts, greenhouse gas emissions, noise, and mitigation. We have enclosed our detailed comments. Based on our analysis, EPA rates the DEIS "Environmental Concerns – Insufficient Information" (EC-2). Please see the enclosed "Summary of Rating Definitions."

The FHWA/MnDOT Agency and Public Coordination Plan (version 3, 2014) for this project identifies that FHWA intends to issue a combined Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). The DEIS identifies that the FEIS and ROD are expected in fall 2015. EPA looks forward to your responses to our DEIS comments and further discussions with you and the Corps of Engineers (USACE) regarding upcoming concurrence point (CP) #3 – Preferred Alternative and CP#4 – Mitigation prior to finalizing the FEIS/ROD.

Please provide me with one (1) hard copy and five (5) CDs of the FEIS/ROD when available. If you have any questions regarding our comments, please contact Virginia Laszewski of my staff at (312) 886-7501 or by email at laszewski.virginia@epa.gov.

Sincerely,

Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosures (2): 1. Summary of Rating Definitions, 2. EPA Detailed DEIS Comments

cc: Daryl Wierzbinski, U.S. Army Corps of Engineers, Regulatory Project Manager, Two Harbors Field Office, 1554 Highway 2, Suite 2, Two Harbors, MN 55616
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EPA Detailed Comments on the FHWA/MnDOT US Highway 53 Virginia to Eveleth Draft Environmental Impact Statement (DEIS) (December 2014) (CEQ No.: 20140363)

PURPOSE AND NEED

EPA concurred with the purpose and need presented in the DEIS for the US 53 project in our letter dated September 2, 2011.

ALTERNATIVES

EPA concurred with all alternatives that undergo detailed analysis in the DEIS in our letters dated July 17, 2013 and October 30, 2013.

1) **No-Build (Closure of the Easement Segment of US 53) Alternative:** This alternative would close the easement segment of US 53, resulting in traffic being rerouted to other existing highways.
2) **Existing US 53 Alternative:** This alternative would keep US 53 where it is and open to traffic by addressing the economic, legal, and engineering issues associated with resolving the terms of the easement agreement with United Taconite (UTAC).
3) **Alternative M-1:** This new four-lane roadway alignment southwest of the existing US 53 segment would mostly follow the grade created by the now backfilled Auburn Pit through the active UTAC Mine.
4) **Alternative E-1A:** This new four-lane roadway alignment would cross the Rouchleau Pit northeast of the existing US 53 segment. E-1A goes through UTAC permit-to-mine and environmental setting boundaries. Two options were considered for Alternative E-1A: 1) RSS (Reinforced Soil Slope) Option and 2) Bridge Option.
5) **Alternative E-2:** This new four-lane roadway alignment would be north of Alternative E-1A. A bridge would cross the Rouchleau Pit at one of the narrow openings. Alternative E-2 is located outside the UTAC permit-to-mine and environmental settings boundaries. Four options were considered for Alternative E-2: Curved Setback Option, Straight Option, Intersection Option, and Interchange Option.

COMPARISION OF ALTERNATIVES

Summary of Environmental Impacts (with mitigation) - Table ES-1 (pp. ES-11 to ES-19) **and Table 10.2-2** (pp. 10-4 to 10-12): These two tables have the same information; however, they do not include the Existing US 53 Alternative. Therefore, the Existing US 53 Alternative is not provided the same level of comparison as the other DEIS alternatives that are included in these tables.

> **Recommendation:** We recommend the Existing US 53 Alternative and the results of its analysis be included in Table ES-1 and Table 10.2-2.

In addition, information in these tables regarding acreage impacts (e.g., wetlands, forest) associated with each of the four (4) options for Alternative E-2 are not displayed under separate E-2 sub-columns for quick identification. Impact acreage numbers associated with a particular option may be indirectly identified. For example, under Wetlands Impacts (pp. ES-15 and 10-8), instead of showing 9.4 acres for wetland impacts for the E-2 Curved Setback Option, it states the following: *"Curved Setback Option: Potential to impact an additional 2.4 acres of wetland compared to the Straight Option".*

> **Recommendation**: We recommend Table ES-1 and Table 10.2-2 include separate sub-columns under Alternative E-2 where impacts are identified for each option in a comparative format. The various impact acreage numbers associated with each Alternative and Alternative options should be clearly identified.

PREFERRED ALTERNATIVE

2.4 Selection of a Preferred Alternative (pp. 2-17 to 2-18) and **10.3 Selection of a Preferred Alternative** (pp. 10-13 to 10-18): The DEIS identifies Alternative E-2 with a compressed diamond interchange between US 53 and MN 135 as the preferred alternative. According to the DEIS, *"Alternative E-2 includes a 1,300-foot bridge with 180-foot or taller bridge piers within the Rouchleau Pit. Both the Straight Option and Curved Setback Option are being carried forward with the preferred alternative for further refinement: however, one will be identified as the selected option in the Final EIS based on public and agency comment, refinement of design, and overall environmental impacts."*

> **Recommendation**: EPA supports the Straight Option because it impacts fewer acres of forest and wetland resources than the Curved Setback Option.

The alignment of Alternative E-2 is expected to encounter an unmined area of the Biwabik Iron Formation that contains mineral resources.

> **Recommendation**: Due to the presence of mineral resources within the footprint of the DEIS preferred alternative, we recommend the FEIS clearly describe what measures are to be taken to avoid the potential for another future relocation of US 53.

3.2 Intermodal Transportation, 3.2.2.5 Alternative E-2 – Bicycles and Pedestrians (p. 3-12): The DEIS states: *"The termination of the MnDOT easement by RGGS/UTAC does not directly affect the Mesabi Trail." ". . . E-2 could include an easement along the eastern edge of the new alignment for the Mesabi Trail to be reconstructed as part of the project but funded by the St. Louis and Lake Counties Regional Railroad Authority (SLLCRRA). . . "The final design will be discussed in the Final EIS."* The E-1A and E-2 Build Alternatives are located north of existing US 53. The DEIS shows that the Mesabi Trail is also located on the north side of MN 135 and existing US 53 and does not extend south into the Midway area of Virginia.

> **Recommendation:** To encourage the use of multimodal travel, we recommend

FHWA/MnDOT consider adding a pedestrian/bicycle (ped/bike) path along the entire length of the 4-lane roadway build preferred alternative that is ultimately chosen in order to connect the Midway community on the east side of the mining area pits to Virginia on the west side of the mining area pits and the 115-mile long Mesabi Trail. This would also allow for a direct ped/bike path connection from Midway to Gilbert and the 23 other communities from Ely to Grand Rapids, Minnesota. Consider using vehicle and ped/bike rotaries for intersection/interchange designs. For the US 53 ped/bike access to continue south of Midway, consider working with the Trail Hawk Snowmobile Trail owners to find a feasible way to connect the existing private Trail Hawks Snowmobile Trail into a US 53 project ped/bike path.

WETLAND RESOURCES

Discrepancies in wetland impact acreages were noted throughout the document and appendices. Examples include:

- Page 5-28 of the DEIS states that Alternative E-2 would impact approximately 5.9 acres of wetland for the Intersection Option and 6.6 acres of wetland for the Interchange Option. However, Appendix J (page 12) states that E-2 overall wetland impacts are expected to be no more than 4.9 acres.
- Table 5.4-1 (Wetland Impacts by Alternative) proposes complete impacts to 1.0-acre Wetland 12; however, Wetland 12 was not noted in the summary of proposed wetland impacts in Appendix J for Alternative E-2.
- Table 5.4-1 proposes impacts to 0.01 acres of Wetland 45; however, Wetland 45 was not noted in the summary of proposed wetland impacts in Appendix J for Alternative E-2.
- Table 5.4-1 proposes impacts to 1.9 acres of Wetland 24; the summary of impacts in Appendix J states impacts to Wetland 24 will be 1.87 acres.
- Table 5.4-1 proposes impacts to 0.30 acre of Wetland 25; the summary of impacts in Appendix J states impacts to Wetland 25 will be 0.09 acre.
- Table 5.4-1 proposes impacts to 0.9 acre of Wetland 26; the summary of impacts in Appendix J states impacts to Wetland 26 will be 0.75 acre.
- Table 5.4-1 proposes impacts to 0.02 acre of Wetland 28, the summary of impacts in Appendix J states impacts to Wetland 28 will be 0.01 acre.
- Table 5.4-1 proposes impacts to 0.03 acre of Wetland 29; the summary of impacts in Appendix J states impacts to Wetland 29 will be 0.01 acre.
- Table 5.4-1 proposes impacts to 0.09 acre of Wetland 30; the summary of impacts in Appendix J states impacts to Wetland 30 will be 0.07 acre.
- Table 5.4-1 proposes impacts to 0.3 acre of Wetland 32; the summary of impacts in Appendix J states impacts to Wetland 32 will be 0.28 acre.
- Table 5.4-1 proposes impacts to 0.2 acre of Wetland 43; the summary of impacts in Appendix J states impacts to Wetland 32 will be 0.18 acre.
- Table 5.4-1 proposes impacts to 0.07 acre to Wetland 44; the summary of impacts in Appendix J states impacts to Wetland 44 will be 0.08 acre.

Recommendation: EPA recommends that wetland acreage impact summaries be verified and that references throughout the FEIS and appendices be amended to provide the same information throughout the documents.

Table 5.4-1 (Wetland Impacts by Alternative) reports some wetland acreages/expected acreages of impact in tenths of an acre, and some in hundredths of an acre. These numbers vary from numbers provided in Appendix J impact summaries. Examples include:

- Table 5.4-1 states impacts to Wetland 24 are expected to be 1.9 acres; Appendix J accounts for this impact as 1.87 acres.
- Table 5.4-1 states impacts to Wetland 32 are expected to be 0.3 acre; Appendix J accounts for this impact as 0.28 acre.
- Table 5.4-1 states impacts to Wetland 43 are expected to be 0.2 acre; Appendix J accounts for this impact as 0.18 acre.

Recommendation: EPA recommends that wetland acreage numbers (size, impact, etc.) be specified to the hundredth of an acre in all locations throughout the document and appendices. Specifications to the hundredth of an acre are more accurate.

Table 5.4-1 (Wetland Impacts by Alternative) accounts for the interchange option associated with Alternative E-2 (preferred alternative) and only for the Straight Option. The DEIS states under the table, "*For Alternative E-2, the Straight Option is represented in the table. The Curved Setback Option would result in 2.4 acres of additional wetland impact, primarily to Wetland 32.*" Since a selection has not been made between the Straight Option and the Curved Setback Option, FHWA should have included referenced the E-2 column impacts as "Interchange Option/Straight Option" and included a second E-2 column with impacts for the "Interchange Option/Curved Setback Option." This would allow for reviewers to discern the differences in wetland impacts associated with options still under study.

Recommendation: Modify Table 5.4-1 to include the impacts associated with all alternatives that were carried forward, including information discerning between sub-options of alternatives.

Comparing Figure 5.4-1 (Wetlands) to Figure 5.5-3 (Potential Stormwater Ponds for E-2), it appears that a stormwater basin is proposed to be constructed in Wetland 36. Another appears to be proposed in the vicinity of impacted portions of Wetland 24.

Recommendation: Natural wetlands should not be used as pollution prevention devices. All detention basins should be sited outside of existing natural wetlands. The FEIS should discuss the siting and locations of detention basins and clarify if wetlands are, or are not, proposed to be used as detention.

Figure 5.4-1 (Wetlands) shows wetland impacts associated with each alternative. However, the scale is too small, and the overlap of the various alternatives too great, to determine each alternative's impacts to specific wetlands. As an example, Wetlands 26, 43, 44, and 45 appear fully impacted by Alternative E-2 in this figure, but when comparing this Figure to Table 5.4-1 (Wetland Impacts by Alternative), the Table does not show them as being fully impacted.

Recommendation: In the FEIS, break Figure 5.4-1 into several smaller, zoomed-in figures that show wetland acreage impacts, the wetland number, acreage of impact, and acreage remaining.

Placement of fill materials into Waters of the U.S. will require that the project comply with the Section 404(b)(1) guidelines under the Clean Water Act. These guidelines are summarized as follows:

- Least Environmentally Damaging Practicable Alternative (LEDPA) – There must be no practicable alternative to the proposed discharge (impacts) which would have less adverse impacts on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;
- No Violation of Other Laws – The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- No Significant Degradation – The project must not cause or contribute to significant degradation of Waters of the United States; and
- Minimization and Mitigation of Adverse Impacts – The project must include appropriate and practicable steps to avoid impacts to regulated Waters of the United States. Where impacts are unavoidable, there must be documentation on how impacts have been minimized. Finally, compensatory mitigation to offset unavoidable, minimized impacts to the aquatic ecosystem must be provided.

Recommendations: An alternatives analysis for prudent and feasible alternatives should be conducted for proposed impacts to all Waters of the United States, including wetlands. The 404(b)(1) analysis should be included in the FEIS. Examination of alternatives should include project modifications that fulfill the stated project purpose and result in no impacts to existing Waters of the U.S., or modifications to the project that would minimize impacts to best maintain the functions, values, and habitat of the existing waters. Such alternatives should address options such as modifying the project to reduce required fill amounts, use of more environmentally-beneficial project, and project components that support and improve the existing aquatic ecosystems. Feasible and prudent alternatives should also take into consideration the costs, existing technology, logistics of the project, and requirements for mitigation under Clean Water Act Section 404(b)(1) guidelines. EPA requests that the FEIS include the following:

- A robust discussion of Clean Water Act Section 404/401 permitting, including a discussion on Section 401 Water Quality Certification requirements;

- A robust discussion about how the sequencing established by the Clean Water Act Section 404(b)(1) guidelines has been applied, namely, avoidance first, then demonstration of impact minimization, then mitigation for unavoidable, minimized impacts;
- Project modifications as noted above; and
- A robust discussion of any proposed mitigation, including mitigation sequencing. The compensatory mitigation plan prepared to compensate for any unavoidable impacts should follow applicable USACE St. Paul District guidance including the St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota (dated January 2009) and the St. Paul District public notice addressing the compensatory mitigation siting sequence for impacts to wetlands in Northeastern Minnesota (dated March 9, 2012), as well as USACE's 2008 Mitigation Rule (33 CFR 332).

SURFACE WATER / WATER QUANTITY AND QUALITY / STORMWATER

5.5 Surface Water/Water Quantity and Quality (p. 5-31): The first paragraph states: ***"NOTE TO READER:*** *Water resource-related issues are discussed in a number of different sections in this chapter of the Draft EIS. To facilitate cross-referencing coverage of water resources issues, the summary of topics and Draft EIS sections in the call out box may be useful."* The "call out box" identifies Sections 5.2, 5.3, 5.4 and 5.5 as Water Resource Related Sections. However, a more detailed description of the existing stormwater drainage system is identified in Section 5.1 Utilities in Sub-section 5.1.2 Existing Conditions, City of Virginia (Sanitary Sewer and Storm Sewer) and Table 5.1.2. Summary of US 53 Corridor Utilities' Proposed approach to Relocation.

> **Recommendation:** EPA recommends the "call out box" under Section 5.5 also refer the reader to Section 5.1 Utilities for information regarding the existing stormwater drainage system.

Chapter 5, Section 5.5.1.1 (p. 5-31): Paragraph 2 states, *"Section 303(d) of the Clean Water Act requires states to assess all waters to determine if they meet water quality standards and conduct total maximum daily load (TMDL) studies in order to set pollutant reduction goals. Areas of the project with outlets within one mile of and that flow to MPCA-designated impaired or special waters must incorporate additional Best Management Practices (BMPs), including a stricter stormwater treatment requirement. Impaired waters within one mile of the study area have been identified; however, none of these waters would be stormwater receiving waters for this project."*

Manganika Lake is the ultimate receptacle of all stormwater runoff from this project. Minnesota Adm. Rule 7050.0470 lists the classifications for surface waters in major drainage basins within the state. Manganika Creek is a MN Class 7 (as well as 3C, 4A, 4B, 5, 6) surface water (MN Adm. Rule 7050.0227, Limited Resource Value Water), and Manganika Lake is a MN Class 5 (2B, 3B, 4A, 4B, 6) waterway (MN Adm. Rule 7050.0225, Aesthetic Enjoyment and

Navigational Use). According to the MPCA 2014 listing of impaired water bodies, Manganika Lake is currently listed as impaired due to excess nutrients, eutrophication, and biological indicators (i.e., limited species diversity—indicative of a polluted condition).

> **Recommendation:** EPA recommends the sentence in **Section 5.5.1.1** indicating that "none of these waters would be stormwater receiving waters for this project" be modified in such a manner to acknowledge the State water quality designations for and the current impaired conditions of Manganika Creek and Manganika Lake.

Section 5.5.3.5 (p. 5-34): As written in this section, *"Per NPDES requirements, treatment of stormwater is not required based on the net change in impervious surface area for the project."* That is, (per para 2): The E-2 Alternative "Intersection Option" is forecast to result in a net decrease in impervious area of [approximately] 3 acres; while the E-2 Alternative "Interchange Option" is forecast to result in [approximately] no change. There are seven stormwater treatment ponds proposed for final highway runoff.

EPA understands that the area designated for construction will have the appropriate MN Construction Stormwater Permits (per **Sections 5.5.4.1** and **5.16.1.9**). However, according to Section 7.2.3.7 in the Cumulative Impacts Chapter of the DEIS, there will likely be an increase in impervious surface area due to *"future mining expansion and highway and development projects."*

There will be greater probability of surface runoff at least until the new roadway is built and the current US 53 is deconstructed. The DEIS acknowledges a construction stormwater permit will be issued for this project. If the current US 53 is retained in some form, there likely will be more impervious roadway, not less. If mining proceeds in the easement area, and further development occurs, EPA anticipates there will be more impervious roadway, not less (**Section 7.2.3.7**). FHWA/MnDOT recommend Alternative E-2 as the preferred alternative, which appears to be nearly twice as long as the existing segment of US 53, suggesting a potential increase in impervious area. Ultimately, Manganika Lake is the receptacle of all stormwater runoff (see previous comment on **Section 5.5.1.1**). Manganika Lake is currently listed as impaired due to excess nutrients, eutrophication, and biological indicators (i.e., limited species diversity—indicative of a polluted condition), and MnDOT indicates high levels of methyl mercury.

> **Recommendations:** EPA recommends that FHWA/MnDOT acknowledge in the FEIS the current status of impairment for Manganika Lake, into which all stormwater will flow. We recommend the potential incorporation of BMPs or other mitigation measures into stormwater pond design be addressed in **Section 5.5.3.5**, as a long-term pollution prevention strategy for the region, given the likely increase in development and mining activity. A surface water pollution prevention plan (SWPPP) may be required for runoff directed to Manganika Creek. EPA recommends acknowledging the same in **Sections 5.5.4.2** and **7.2.3.7**.

5.5.2 Existing Conditions (p. 5-32): Existing drainage patterns are briefly discussed and the reader is referred to Figure 5.1-1 Known Location of Municipal Utilities in the Study Area for a depiction of the existing stormwater drainage system and direction of flow in the project area. While Figure 5.1-1 may show the City of Virginia's existing Stormwater Drainage System, it does not show existing stormwater flow patterns for some areas associated with some of the DEIS alternatives. For example, Figure 5.1.1 does not show all existing drainage patterns associated with the M-1 and E-2 Alternatives. In addition, the Figure 5.1.1 does not show the existing drainage patterns for MN 135 east of the intersection of Landfill Road and existing US 53. The existing drainage pattern for the Midway area of Virginia is not discussed or identified in Figure 5.1-1.

> **Recommendation:** We recommend the existing stormwater drainage patterns and directions of flow be fully identified and discussed in the FEIS, and depicted on Figure 5.1-1 or other appropriate FEIS figure.

5.5.3 Environmental Consequences (p. 5-32): *"Under all alternatives, the stormwater drainage way east of the Rouchleau Pit and north of the Midway area that flows parallel to and along the north side of US 53 would remain after MnDOT vacates the existing easement agreement area. See Chapter 7: Cumulative impacts regarding cumulative stormwater impacts due to mining operations."* The Cumulative Impacts Chapter of the DEIS (p. 7-6) states, *"Under the Existing US 53, M-1, E-1A, or E-2 Alternatives, mining by UTAC of the pit crossing areas would cut off the stormwater east of the Rouchleau Pit that currently crosses along the north side of US 53, requiring rerouting of this flow to another receiving water. These projects would be subject to state and federal requirements."*

Potential stormwater pond locations for the M-1, E-1A and E-2 alternatives are identified in the DEIS (Figures 5.5-1, 5.5-2, 5.5-3). The DEIS does not identify what would happen to the stormwater associated with any of the DEIS alternatives and the existing drainage patterns on the east side of the pits once existing US 53 is removed, and during and after mining operations through the existing US 53 easement area.

> **Recommendation**: We recommend that the FEIS identify, discuss and depict on a figure or figures the proposed stormwater drainage system, directions of flow and potential receiving water/s for stormwater associated with the FEIS preferred alternative. The discussions should cover and the figures should show conditions before, during and after mining operations through the easement area.

NOISE

4.6.3.5 Alternative E-2: The DEIS (p. 4-48) states, *"Mitigation for noise impacts could include use of noise barriers in areas where feasible and reasonable (i.e., Area C and, with the Curved Setback Option, Area F), and benefited receptors (homes or other land uses sensitive to noise) would vote on the noise barrier, including those owned or rented by environmental justice residents . . ."*

Recommendation: We recommend the FEIS disclose how MnDOT will inform owners and residents/renters that are directly impacted by increases in noise levels that they may vote for noise barriers for areas where MnDOT has determined that noise barriers are feasible and reasonable (i.e., Are C and, with the Curved Setback Option, Area F). Describe how and when the voting process is conducted and the steps MnDOT will take to insure that all affected owners and renters are well informed regarding noise impacts and how to exercise their opportunity to vote regarding noise barrier mitigation.

VEGETATION / FOREST IMPACTS / T &E SPECIES / CLIMATE CHANGE

Table 5.9-1 Acreage of Cover Types within Study Area Before and After Construction by Alternative (p. 5-62): This table does not provide acreage impacts associated with the Curved Setback Option for Alternative E-2. According to information found elsewhere in the DEIS, the E-2 Curved Setback Option has 9 acres of wetland impacts, 43 to 47 acres of wooded/forest impacts, and 9 acres of Shrub/Grassland impacts.

Recommendation: EPA recommends FEIS Table 5.9.1 provide a separate column for the E-2 Curved Setback Option and report impacts accordingly.

Forests provide wildlife habitat and protect surface and groundwater quantity and quality in the watershed, in part, by stabilizing the soil and providing a permeable surface for water infiltration. In addition, it is not clear whether some trees associated with the potential forest losses are currently used or could be used in the future as maternity roosts for the northern long-eared bat (proposed for federal listing as an endangered species in all 87 Minnesota counties).

Recommendation: We recommend MnDOT undertake voluntary upland forest mitigation to compensate for the loss of 43 to 47 acres of wildlife habitat and reduced water quality protection in the watershed associated with the US 53 project.

5.11 Threatened and Endangered Species

Northern Long-Eared Bat *(Myotis septentrionalis)* (p. 5-67 and p. 5-68): The DEIS states, *"In order to accurately assess the potential for project-related impacts to this species, MnDOT is working with the USFWS (US Fish and Wildlife Service and the DNR (Minnesota Department of Natural Resources). Field investigations were conducted in the summer/fall of 2014 and review of findings is underway. The DNR report is not yet finalized; however, discussion with DNR staff indicates that the northern long-eared bat echolocation calls were recorded at each sampling station in the study area (see Figure 5.11-2). The DNR study also identified a mine void in the study area that could be a potential bat hibernaculum (see Figure 5.11-3 for approximate cave location). . . . The information gathered is informing the assessment of the potential for jeopardy/effect. Updated results of studies and on-going coordination will be included in the Final EIS."*

Recommendations: In addition to the FEIS including an update of the results of the northern long-eared bat studies, EPA recommends the FEIS also identify any USFWS

and/or MnDNR suggested/recommended measures that could be taken to avoid, minimize and/or compensate for potential adverse impacts to the bat from the proposed US 53 project.

5.15 Climate Change

The DEIS does not identify and discuss how the proposed US 53 project may be affected by events associated with climate change. For example, the increased frequency and intensity of precipitation events have been associated with climate change. This might affect how the project is designed, constructed, and operated to handle stormwater.

> **Recommendation:** We recommend that the FEIS identify and discuss any anticipated effects of climate change on the project and possible adaptation measures. For example, discuss any effects that predicted increases in the number and/or intensity of precipitation events associated with climate change may have on sizing bridge spans, culvert openings, and stormwater management measures in order to accommodate such events and ensure project longevity, public health, and safety.

CONSTRUCTION IMPACTS

Air Quality/Greenhouse Gas Emissions: The project is expected to comply with applicable air quality standards. However, the DEIS does not explain how the project will reduce or minimize air emissions, including greenhouse gas (GHG) emissions, during the construction phase.

> **Recommendation:** We recommend FHWA/MnDOT commit to implementing clean diesel strategies to the maximum extent possible during the construction phase. Examples include an anti-idling policy for internal combustion engines and the use of diesel construction equipment with lower emissions characteristics.